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GlasCraft
DISPENSING EXCELLENCE

USER MANUAL

Probler P2 Elite

Dispense Gun

For use with non-flammable foam and polyurea.
Not for use in explosive atmospheres.

90-110 psi (0.62-0.76 MPa, 6.2-7.6 bar) Air Inlet Pressure Range
3200 psi (22 MPa, 220 bar) Maximum Static Fluid Pressure

Important Safety Instructions
Read all warnings and instructions in this manual. Save these instructions.

CE CERTIFIED

GlasCraft An ISO 9001 Approved Company

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Warnings

The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbol refers to procedure-specific risk. Refer back to these warnings. Additional, product-specific warnings may be found throughout the body of this manual where applicable.

⚠ WARNING	
	TOXIC FLUID OR FUMES HAZARD Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed. • Read MSDS's to know the specific hazards of the fluids you are using. • Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines. • Always wear impervious gloves when spraying or cleaning equipment.
	PERSONAL PROTECTIVE EQUIPMENT You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. This equipment includes but is not limited to: • Protective eyewear • Clothing and respirator as recommended by the fluid and solvent manufacturer • Gloves • Hearing protection
	SKIN INJECTION HAZARD High-pressure fluid from gun, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. Get immediate surgical treatment. • Do not point gun at anyone or at any part of the body. • Do not put your hand over the spray tip. • Do not stop or deflect leaks with your hand, body, glove, or rag. • Close material shutoff valves when not spraying. • Follow Pressure Relief Procedure in this manual, when you stop spraying and before cleaning, checking, or servicing equipment.
	BURN HAZARD Equipment surfaces and fluid that's heated can become very hot during operation. To avoid severe burns, do not touch hot fluid or equipment. Wait until equipment/fluid has cooled completely.
	FIRE AND EXPLOSION HAZARD Flammable fumes, such as solvent and paint fumes, in work area can ignite or explode. To help prevent fire and explosion: • Use equipment only in well ventilated area. • Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc). • Keep work area free of debris, including solvent, rags and gasoline. • Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present. • Ground all equipment in the work area. • Use only grounded hoses. • Hold gun firmly to side of grounded pail when triggering into pail. • If there is static sparking or you feel a shock, stop operation immediately. Do not use equipment until you identify and correct the problem. • Keep a working fire extinguisher in the work area.

Warnings

⚠ WARNING

EQUIPMENT MISUSE HAZARD

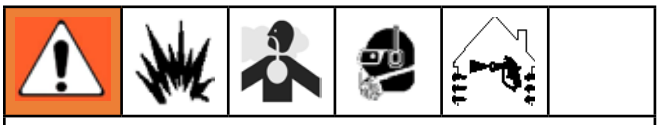
Misuse can cause death or serious injury.

- Do not operate the unit when fatigued or under the influence of drugs or alcohol.
- Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See Technical Data in all equipment manuals.
- Use fluids and solvents that are compatible with equipment wetted parts. See Technical Data in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS forms from distributor or retailer.
- Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only.
- Do not alter or modify equipment.
- Use equipment only for its intended purpose. Call your distributor for information.
- Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.
- Do not kink or over bend hoses or use hoses to pull equipment.
- Keep children and animals away from work area.
- Comply with all applicable safety regulations.

PRESSURIZED ALUMINUM PARTS HAZARD

Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in pressurized aluminum equipment. Such use can cause serious chemical reaction and equipment rupture, and result in death, serious injury, and property damage.

Isocyanate Hazard



Spraying materials containing isocyanates creates potentially harmful mists, vapors, and atomized particulates.

Read material manufacturer's warnings and material MSDS to know specific hazards and precautions related to isocyanates.

Prevent inhalation of isocyanate mists, vapors, and atomized particulates by providing sufficient ventilation in the work area. If sufficient ventilation is not available, a supplied-air respirator is required for everyone in the work area.

To prevent contact with isocyanates, appropriate personal protective equipment, including chemically impermeable gloves, boots, aprons, and goggles, is also required for everyone in the work area.

Moisture Sensitivity of Isocyanates

Isocyanates (ISO) are catalysts used in two component foam and polyurea coatings. ISO will react with moisture (such as humidity) to form small, hard, abrasive crystals, which become suspended in the fluid. Eventually a film will form on the surface and the ISO will begin to gel, increasing in viscosity. If used, this partially cured ISO will reduce performance and the life of all wetted parts.

The amount of film formation and rate of crystallization varies depending on the blend of ISO, the humidity, and the temperature.

To prevent exposing ISO to moisture:

- Always use a sealed container with a desiccant dryer in the vent, or a nitrogen atmosphere. **Never** store ISO in an open container.
- Keep the ISO lube pump reservoir filled with Graco Throat Seal Liquid (TSL), Part 206995. The lubricant creates a barrier between the ISO and the atmosphere.
- Use moisture-proof hoses specifically designed for ISO, such as those supplied with your system.
- Never use reclaimed solvents, which may contain moisture. Always keep solvent containers closed when not in use.
- Never use solvent on one side if it has been contaminated from the other side.
- Always park pumps when you shutdown.
- Always lubricate threaded parts with Part 217374 ISO pump oil or grease when reassembling.

Keep Components A and B Separate

CAUTION
To prevent corss-contamination of the equipment's wetted parts, never interchange component A (isocyanate) and component B (resin) partrs. The gun is shipped with the A side on the left. The fluid manifold, fluid housing, side seal assembly, check valve cartridge, and mix chamber are marked on the A side.

Foam Resins with 245 fa Blowing Agents

New foam blowing agents will froth at temperatures above 90°F (33 °C) when not under pressure, especially if agitated. To reduce frothing, minimize preheating in a circulation system.

Changing Materials

- When changing materials, flush the equipment multiple times to ensure it is thoroughly clean.
- Always clean the fluid inlet strainers after flushing.
- Check with your material manufacturer for chemical compatibility.
- Most materials use ISO on the A side, but some use ISO on the B side.
- Epoxies often have amines on the B (hardener) side. Polyureas often have amines on the B (resin) side.

Section 1 - Installation: Introduction

Introduction

Before operating, maintaining or servicing any **GlasCraft** system, read and understand all of the technical and safety literature provided with **GlasCraft** products. If you do not have the proper or related manuals and safety literature for your **GlasCraft** system, contact your **GlasCraft** distributor or **GlasCraft,** Inc.

In this **GlasCraft** technical and safety publication, the following advisories will be provided where appropriate:

Information about the procedure in progress.

⚠ WARNING

Indicates a hazardous situation that can result in death or serious injury.

The information in this document is intended only to indicate the components and their normal working relationship typical use. Each assembly should be directed by a **GlasCraft** distributor or made from the **GlasCraft** Assembly instructions provided.

This manual provides information for the assembly, operation, maintenance and service of this **GlasCraft** product as used in a typical configuration. While it lists standard specifications and procedures, some deviations may be found.

In order to provide our users with the most up-to-date technology possible, we are constantly seeking to improve products. If a technological change occurs after a product is on the market, we will implement that technology in future production and, if practical, make it available to current users as a retrofit, update or supplement. If you find a discrepancy between your unit and the available documentation, contact your **GlasCraft** distributor to resolve the difference. **GlasCraft,** Inc. reserves the right to change or modify this product as it deems necessary.

Careful study and continued use of this manual will provide a better understanding of the equipment and process, resulting in more efficient operation, longer trouble-free service and faster, easier troubleshooting.

Section 1 - Installation: Standard Equipment

Standard Equipment	
Part Number	**Description**
23950-XX	Probler P2 Dispense Gun
GC-1386	User Manual

Section 1 - Installation: Equipment Assembly

How The Gun Works

The trigger actuates a small valve in the gun handle that controls the flow of air into the piston assembly. When the trigger is pulled, air flows through the valve to the front of the piston. Air pressure forces the piston towards the rear of the gun, simultaneously closing off the purge air and moving the mixing chamber to a position where the mixing chamber orifices are aligned with the the orifices in both, the side block seal and check valve assemblies.

The proper alignment of the orifices is determined by the setting of the Set Screw, p/n 17259-16F, located at the rear of the piston assembly. This set screw determines the length of travel of the air piston and has been preset at the factory and should not require adjustment. (SEE MAINTENANCE SECTION)

The two fluids (isocyanate and polyol) then flow thru the material shut-off valves, seal, and check valve assemblies and into the mixing chamber. The two fluids impinge against one another and exit the mixing chamber in a swirling, conical spray pattern.

When the trigger is released, the mixing chamber returns to its original position and purge air flows into the mixing chamber housing, p/n 23963-00. The front tip o-ring, p/n 23974-00 keeps air purge inside the gun head, p/n 23901-00, forcing all of the air through the orifices in the mixing chamber, for a complete, total and constant purge.

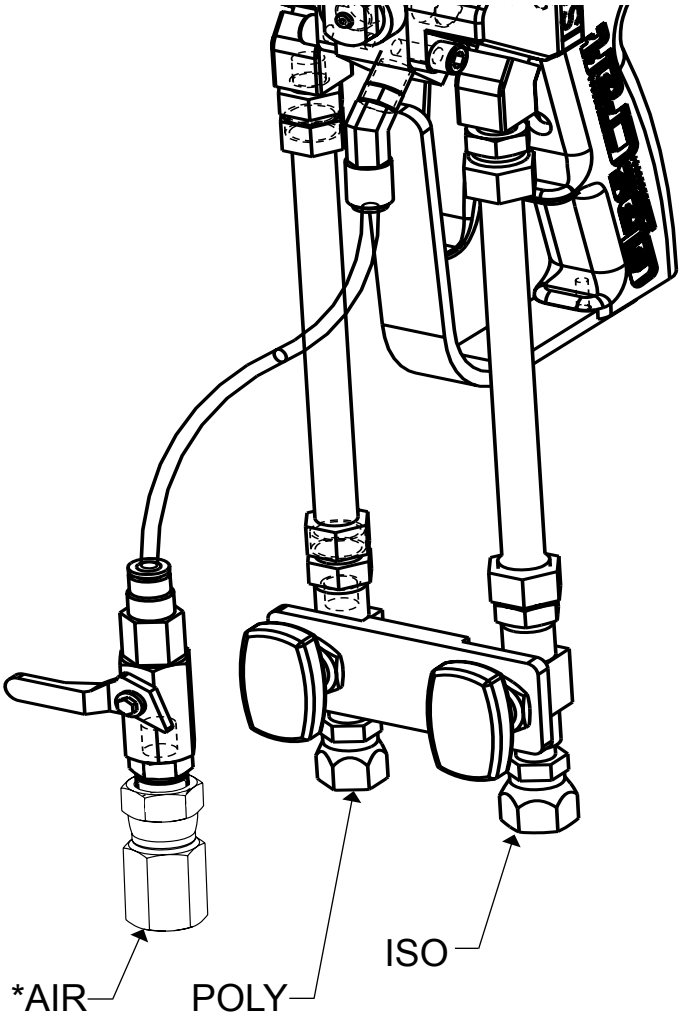
This purge air continues to flow thru the mixing chamber until the air valve has shut-off all air to the gun; or until the trigger is pulled again.

GlasCraft Equipment

Air Hose is ¼" in. NPS

JIC and SAE Fittings ***DO NOT*** require the use of teflon tape.

Once the fittings are attached and tight, refer to system manuals for start-up instructions.



The P2 Elite gun attaches the same way if equipped with the optional horizontal set-up.

* Fitting 23825-00 is an unattached part that must be connected to the air hose first, then connected to the gun.

Installing P2 Elite on Equipment other than GlasCraft

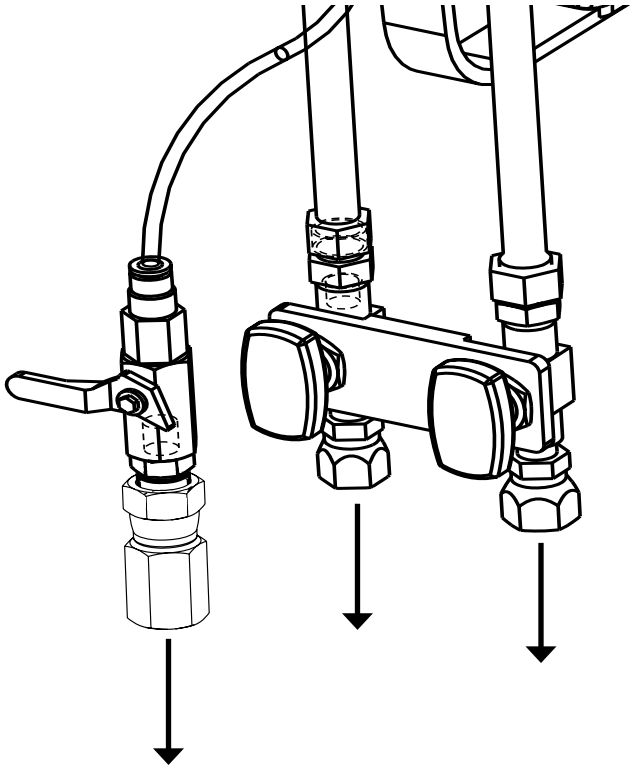
⚠ WARNING

Do not place any part of the body in the path of the material spray.
Do not point the gun at or near other personnel.
Do not look into the mixing chamber orifice at any time.
Because of the hazardous materials used in this equipment, it is recommended that the operator use an air mask, goggles, protective clothing, and other safety equipment as prescribed by current regulations, recommendations of the chemical suppliers, and the laws in the area where the equipment is being used.

If original equipment does not require the use of an un-heated whip hose or isolation hose, the P2 can be directly installed on to the material hose.

1. Remove the fittings from the original gun.

2. Remove GCI fittings, p/n's 117634, 117635 from PG-15-01 ball valves. GCI ball valves are 1/8 in. NPT female. Remove GCI fitting 23825-00 from 16832-00 air slide valve. The air slide valve is a 1/4 in. NPSM.



3. Install the original fittings into PG-15-01 valves.

It is recommended to use a non-permanent thread lock on the 1/8 in. NPT threads to assist as a sealant and keep the fittings from twisting with gun movement.

4. Install the gun on the original Hoses.

⚠ WARNING

Relieve ALL system fluid and air pressures according to manufacturer's instructions.

Section 2 - Operation: Start-Up Instructions

Refer to specific system user manuals for complete system installation.

Pre operation Checklist

Check that all fittings are tight and air regulators are turned to ***"zero pressure"***.

⚠ WARNING

Do not place any part of the body in the path of the material spray.
Do not point the gun at or near other personnel.
Do not look into the mixing chamber orifice at any time.
Because of the hazardous materials used in this equipment, it is recommended that the operator use an air mask, goggles, protective clothing, and other safety equipment as prescribed by current regulations, recommendations of the chemical suppliers, and the laws in the area where the equipment is being used.

Operating Requirements

- 8 - 10 CFM at 90 -110 psi (0.62-0.76 MPa, 6.2-7.6 bar)
- MAXIMUM Static Fluid Pressure - 3200 psi (22 MPa, 220 bar)

⚠ WARNING

The GlasCraft Probler P2 Elite Gun is designed and manufactured to operate at a maximum static fluid pressure not to exceed 3200 psi (22 MPa, 220 bar). When attached to a GlasCraft proportioning system, this pressure will not be exceeded. However, if the GlasCraft Probler P2 Elite gun is installed on any other manufacturer's self-designed equipment, great care must be taken to ensure that the maximum static fluid pressure not be exceeded.

If the gun is being used for short periods of spraying, GlasCraft recommends that the purge air be left ON.

The material shut-off valves, p/n PG-15-01 can be left in the OPEN position during these periods of time.

⚠ WARNING

If purge air is to be turned OFF, BOTH MATERIAL SHUT-OFF VALVES, p/n PG-15-01, MUST BE TURNED TO THEIR "OFF" POSITION BEFORE TURNING "OFF" THE PURGE AIR !
Failure to follow this procedure will possibly result in the gun head becoming encased with mixed product.

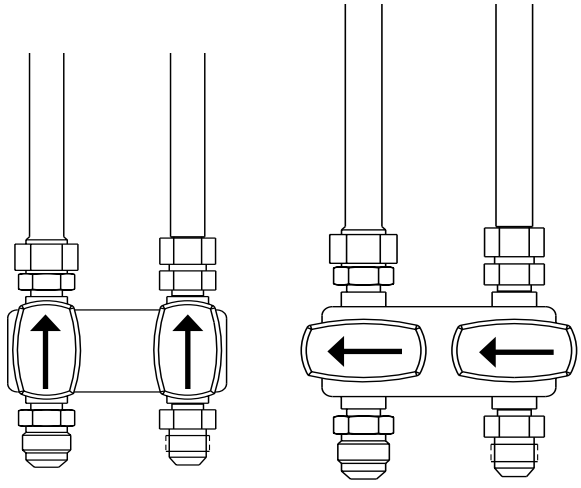
For proper purging following use, the air valve must be left OPEN for at least 15 SECONDS after the trigger has been released.

The flow of material into the mixing chamber is controlled by the ON or OFF position of the two material shut-off valves.

Both material shut-off valves must be FULLY OPEN during dispensing and must be FULLY CLOSED during service or extended shut-down periods.

⚠ WARNING

BOTH MATERIAL SHUT-OFF VALVES, p/n PG-15-01, MUST BE TURNED TO THEIR "OFF" POSITION BEFORE REMOVING SCREWS, P/N 9944-16C!!
Failure to follow this procedure will possibly result in the gun head becoming encased with mixed product.



ON ***OFF***

Refer to system manuals for start-up and shut-down procedures.

Spray Technique

Always operate safely and follow all safety procedures outlined.

To achieve the optimum spray pattern for each application, the appropriate mixing chambers are available in six round and six flat spray sizes. Hardened mixing chambers are also available (see mixing chamber chart).

The standard mixing chamber supplied with your gun will be adequate for all but the smallest and largest applications.

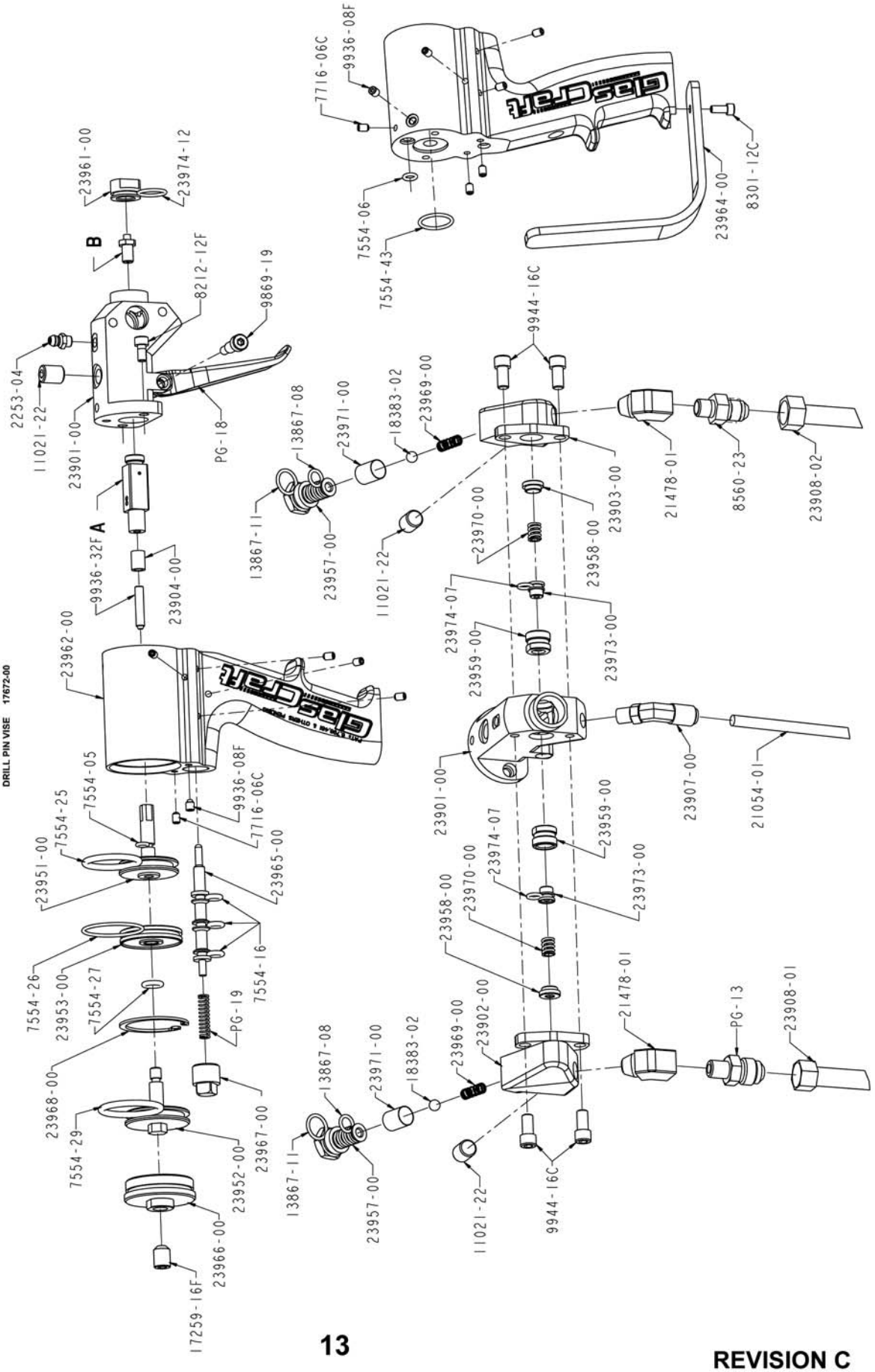
Foam rise and cure times will vary according to the material and substrate temperature. Higher material or substrate temperature will increase rise and cure times; lower material or substrate temperatures will decrease rise and cure times. Consult your chemical manufacturer's data specification sheets for their recommended spray temperatures. Under most circumstances, both components will be used at identical temperatures.

Higher pressures and temperatures may be used to increase material break-up, improve mixing and speed rise times. With hose lengths over 50 ft., or when material viscosities are high, higher material pump pressures may be necessary.

The gun air valve MUST BE OPENED prior to spraying to provide air for trigger operation and purge air when the trigger is released.

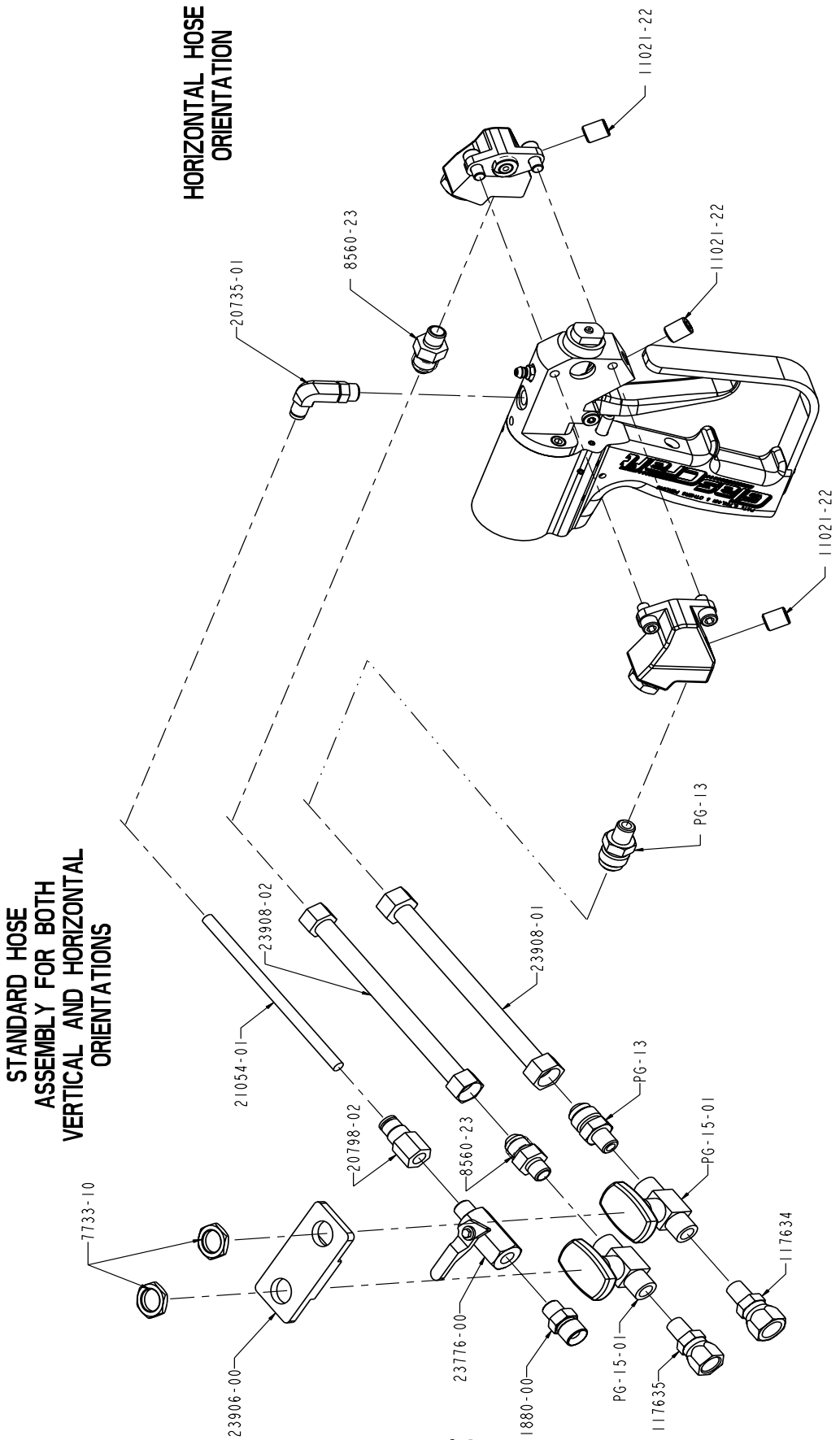
When spraying, the gun trigger may be depressed continuously, or triggered at the end of each stroke. A smooth, even layer is best achieved by moving the gun back and forth in a slow, even motion, overlapping the previous pass about 50 to 75 percent. DO NOT SPRAY OVER RISING FOAM! The ideal gun-to-surface distance is about 18 to 24 inches. Be sure to point the gun directly at the surface to be sprayed. Spraying at an angle to the surface will cause the foam to be rough and will generate overspray.

Section 3 - General Information: 23940-XX P2 Elite Dispense Gun



DRILL KIT	ROUND MIXING CHAMBER	MIXING CHAMBER NOZZLE CLEANING DRILL		MIXING CHAMBER HOLE CLEANING DRILL		CHAMBER COUNTER BORE CLEANING DRILL	
	23960-AA	14963-28	0.033	14963-29	0.022	14963-27	0.043
30059-00	23960-00	14963-30	0.049	14963-24	0.035	14963-13	0.0595
30059-01	23960-01	14963-11	0.057	14963-16	0.042	14963-14	0.067
30059-02	23960-02	14963-12	0.071	14963-17	0.052	14963-46	0.081
30059-03	23960-03	14963-15	0.086	14963-13	0.059	14963-19	0.094
	23960-04	14963-19	0.094	14963-14	0.07		
	23960-05	14963-20	0.116	14963-15	0.086		

GLASCRAFT P/N	A	B	HARDWARE KIT
23940-AA	23960-AA	23977-AA	23979-AA
23940-00	23960-00	23977-00	23979-00
23940-01	23960-01	23977-01	23979-00
23940-02	23960-02	23977-02	23979-00
23940-03	23960-03	23977-03	23979-00
23940-04	23960-04	23977-04	23980-00
23940-05	23960-05	23977-05	23980-00


HORIZONTAL HOSE ORIENTATION
STANDARD HOSE ASSEMBLY FOR BOTH VERTICAL AND HORIZONTAL ORIENTATIONS
110121-22
8560-23
20735-01
110121-22
110121-22
PG-13
23908-02
23908-01
21054-01
PG-13
20798-02
8560-23
PG-15-01
7733-10
117634
23906-00
23776-00
1880-00
PG-15-01
117635

Section 3 - General Information: 23940-XX P2 Elite Parts List

Part Number	Description	Qty.
11021-22	PIPE PLUG	3
117634	SWIVEL HOSE FITTING	1
117635	SWIVEL HOSE FITTING	1
13867-08	O-RING	2
13867-11	O-RING	2
17259-16F	SET SCREW	1
18012-02	HEATED HOSE COVER	2
18383-02	1/4 IN. DIA. BALL	2
1880-00	FITTING	1
20735-01	ELBOW FITTING	1
20798-02	FITTING	1
21054-01	TUBING	3
21478-01	ELBOW FITTING	2
2253-04	LUBE FITTING	1
23776-00	BALL VALVE	1
23825-00	SWIVEL FITTING	1
23901-00	P2-ELITE HEAD	1
23902-00	P2 ELITE POLY SIDE BLOCK	1
23903-00	P2 ELITE ISO SIDE BLOCK	1
23904-00	PISTON SPACER	1
23906-00	HOSE MOUNTING PLATE	1
23907-00	PUSHLOCK SWIVEL ADAPTER	1
23908-01	WHIP HOSE	1
23908-02	WHIP HOSE	1
23951-00	AIR PISTON	1
23952-00	AIR PISTON	1
23953-00	CYLINDER SPACER	1
23957-00	CHECK VALVE FILTER	2
23958-00	DELRIN SEAL	2
23959-00	SEAL HOUSING	2
23961-00	FRONT TIP	1
23962-00	MACHINED HANDLE	1
23964-00	GUARD	1
23965-00	TRIGGER PISTON	1
23966-00	REAR CAP	1
23967-00	TRIGGER PLUG	1
23968-00	RETAINING RING	1
23969-00	SPRING	2
23970-00	SPRING	2
23971-00	FILTER SCREEN	2
23973-00	SIDE SEAL	2
23974-07	O-RING	2
23974-12	O-RING	1
7554-05	O-RING	1

Part Number	Description	Qty.
7554-06	O-RING	1
7554-16	O-RING	3
7554-25	O-RING	1
7554-26	O-RING	1
7554-27	O-RING	1
7554-29	O-RING	1
7554-43	O-RING	1
7716-06C	SET SCREW	11
7733-10	HEX NUT	2
8212-12F	SCREW	2
8301-12C	SCREW	1
8560-23	FITTING	2
9869-19	SHOULDER SCREW	1
9936-08F	SET SCREW	2
9936-32F	SET SCREW	1
9944-16C	SCREW	4
GC-1410	USER MANUAL	1
PG-13	FITTING	2
PG-15-01	BALL VALVE	2
PG-18	TRIGGER	1
PG-19	SPRING	1

Section 3 - General Information: Maintenance

⚠ WARNING

Before attempting to perform any maintenance on this gun,relieve All Fluid and Air Pressures!

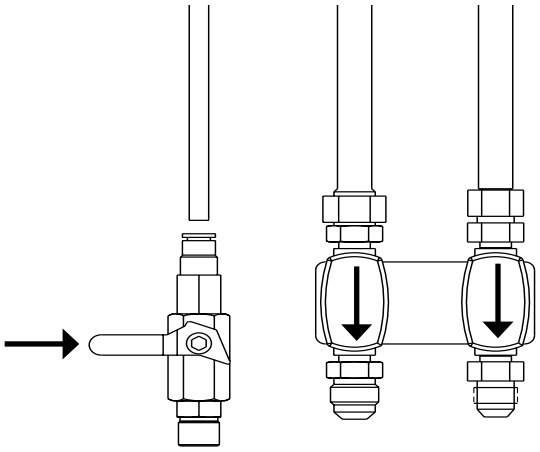
- To relieve fluid and air pressures:
- Turn OFF all air supplies at system except gun trigger air.
- Trigger the gun until all fluid pressures have been relieved.
- Turn OFF the gun trigger air at the system.
- Trigger the gun until all trigger air pressure has been relieved.

Perform Gun maintenance as follows:

1. Check for leaking seals, p/n 23973-00:

• Turn OFF the gun incoming air by closing gun air valve.

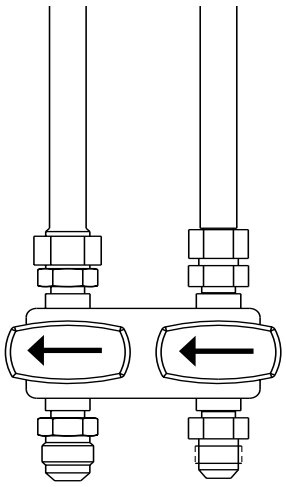
• Turn ON the material ball valves.



- Wait approximately 10 - 20 seconds, then turn ON the incoming air by opening gun air valve.
- Repeat two or three times.
- If any material has been purged from the gun, the seals, p/n 23973-00 are leaking, or o-ring, p/n 23974-07
- Correct leaks by replacing the seals or o-rings and re-checking.

2. Check the material valves, p/n PG-15-01 for any leaks:

• Turn OFF both material valves.



- Trigger the gun several times.
- Turn OFF the gun incoming air by closing the air valve.
- Trigger the gun several times.
- If additional material is purged, the material valves are leaking.
- Correct the leaks by taking off black knobs and turning packing 1/8 in. to 1/4 in. turns at a time until the leak has stopped. Re-check.

3. Check side blocks

• Turn OFF the air valve.

⚠ WARNING

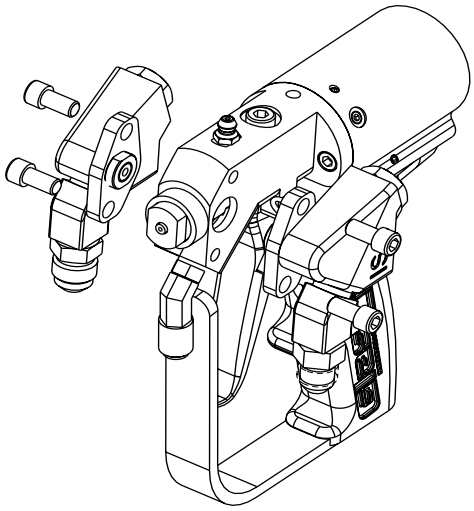
Before removing the side blocks make certain that both material valves are in the OFF positions!

If the material valves are on when the side blocks are removed the gun will quickly become encased in urethane!

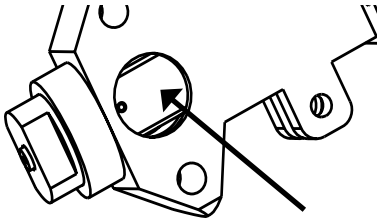
⚠ WARNING

Point gun side blocks down, away from all personnel. Existing fluid pressures could cause material to exit the side blocks with considerable force.

• Take the side blocks off by removing screws, p/n 9944-16C.

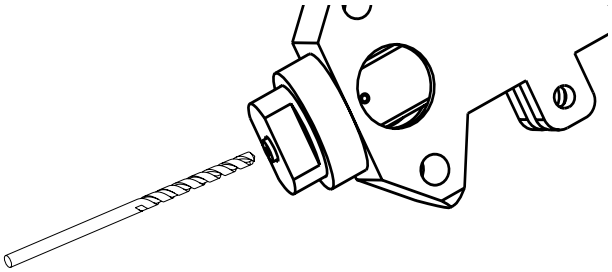


• Examine the sides of the mixing chamber, p/n 23960- for scratches and/or material build-up. Carefully, without scratching the seal surfaces (sides), remove any accumulated material. Solvent can be used to wash accumulated material off of chamber, side blocks, etc. Keep the gun chamber tilted toward the ground so that solvent does not run back into gun. Certain solvents will attack o-rings on chamber shaft causing swelling and deterioration of o-rings.

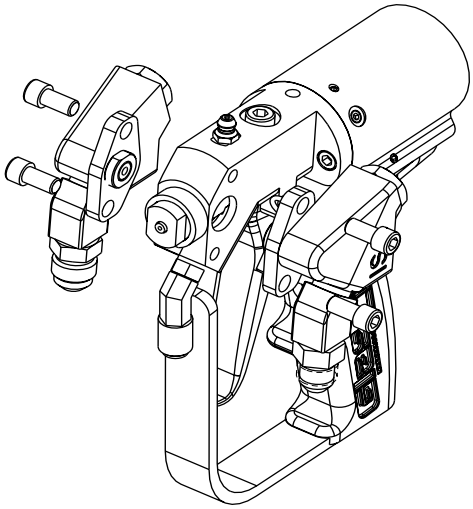


• Place generous amounts of high quality, white lithium grease in each side of the gun front housing and on the side block seals.

• Use correct size drill bit to clean out the mixing chamber exit passage. Use correct size drill bit to clean the inlet side holes of the mixing chamber taking care not to scratch the mixing chamber's polished surfaces. (refer to the chart at front of manual)



• Re-assemble the side blocks and tighten the screws. Grease should appear at the tip of the mixing chamber.



DO NOT open the air valve because this will purge grease from the Gun. The grease should be allowed to remain in the gun overnight.

Section 3 - General Information: Maintenance

Morning Care

1. Clean the snout insert, p/n 23977-XX. Be sure both, the face and bottom flat are Clean. Drill the snout bore out with the correct size bit for Snout. (see chart in front of manual)

2. Clean the inner bore of the chamber. Drill out the chamber snout inlet bore as required.

3. Install the snout insert.

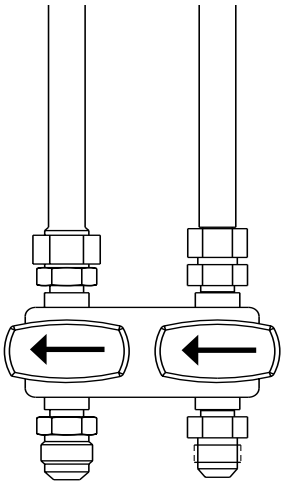
4. Install the air cap, p/n 23961-00 on to the chamber. Tighten finger tight until the cap bottoms out. Snug down with a ½ in. wrench. This does not require high torque. Over tightening can result in chamber damage.

Evening Care

For experienced users

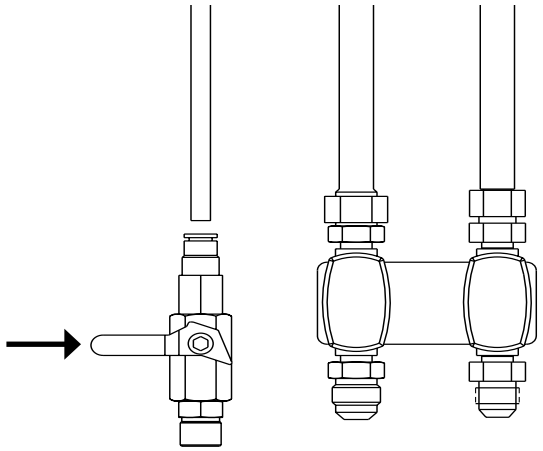
Once you have used the gun with a product and system, and you have become comfortable with techniques on how all the variables are affecting your operations and maintenance requirements, Daily, Weekly, and Monthly Maintenance requirements can be addressed specific to your operation.

1. Turn the ball valves off, p/n PG-15-01, and trigger the gun 5 - 6 times to purge residual pressure.

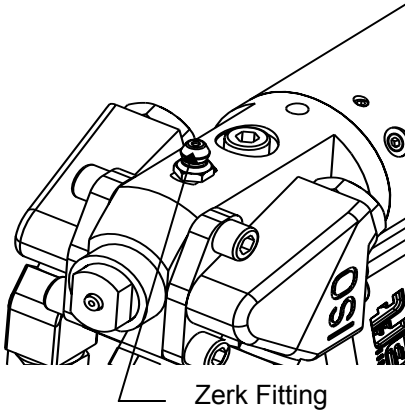


2. Drill out the chamber insert snout with correct size drill bit for insert. (see chart in front of manual)

3. Turn valve halfway back to limit the air purge.

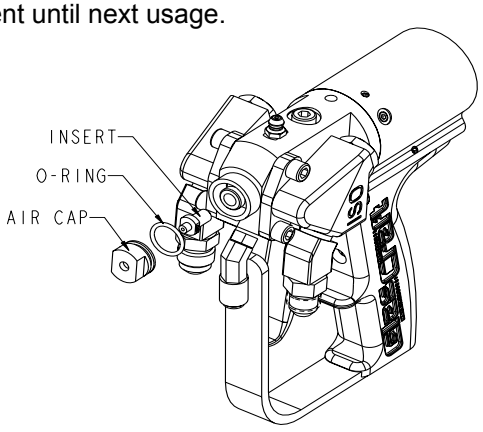


4. Inject white lithium grease into zerk fitting until a light mist of grease is purged through the snout. Shut off the air purge.



5. Remove the air cap, p/n 23961-00 and set to side. If solvent soaking is required, remove the o-ring, p/n 23974-12 before soaking.

6. Remove the insert, p/n 23977-XX and soak in solvent until next usage.



Section 3 - General Information: Maintenance

Refer to specific system user manuals for complete system installation.

Parts Replacement Procedure

⚠ WARNING

Before attempting to perform any maintenance on this gun OR before removing the side blocks, make certain that both gun material valves are in the OFF positions!

If the material valves are on when side blocks are removed, the gun will quickly become encased in urethane!

1. Read each procedure entirely before beginning and refer to the illustrations as needed.
2. Flush and clean all chambers and passages as they become accessible.
3. Clean all parts before assembly.
4. Replace all o-rings and seals with new parts from the appropriate kit.
5. Inspect all parts for wear or damage and replace as required with new *genuine GlasCraft replacement parts from your authorized GlasCraft distributor.*
6. Inspect all threads for wear or damage and replace as required.
7. Tighten all threaded parts securely, but not excessively, upon assembly.
8. Lightly lubricate all o-rings and threads with lithium grease.
9. Check all springs for resilience. They should return quickly to their original (new) length.

Routine Care

⚠ WARNING

Before attempting to perform any maintenance on this gun OR before removing side blocks, make certain that both gun material valves are in the fully OFF positions!

If the material valves are on when side blocks are removed, the gun will quickly become encased in urethane!

It is recommended that the following service be performed on a daily basis.

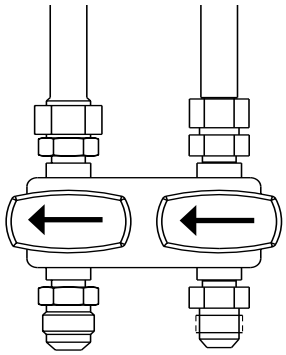
1. Clean the gun using a brush and an appropriate clean solvent.
2. Inspect the side block seals, p/n 23973-00, making certain they are clean and free of scratches, nicks or foreign material. Clean and replace as required.
3. Remove, clean or replace the filter screen, p/n 23971-00.
4. Maintain a reasonable stock level of “wear” items such as seals and o-rings. (see Service & Repair Parts Kits listed in Parts & Illustrations section.)

Piston Throw Adjustment

The P2 Elite gun piston throw is factory set and as a rule, should not require adjustment. The piston throw refers to how far back the air piston will travel when the gun is triggered. Proper throw adjustment will align the mixing chamber side ports with the side block seal thru port. There is a set screw that determines how far the piston will travel before it stops.

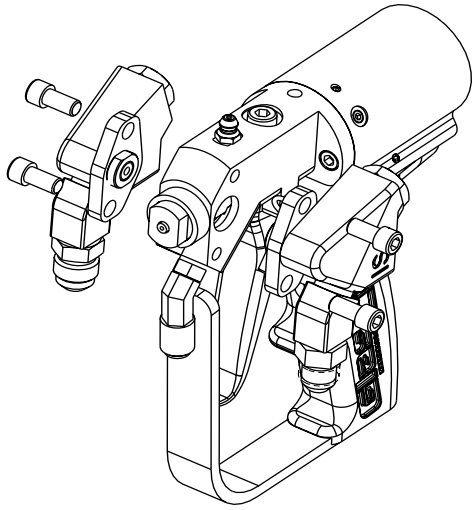
To determine if the throw is correct:

1. Turn the material ball valves, p/n PG-15-01 to the OFF position.

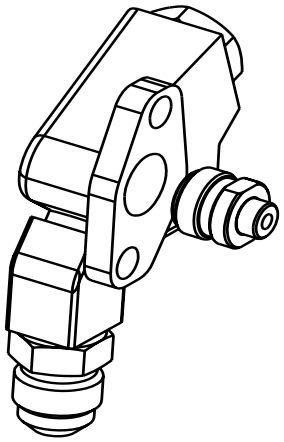


2. Trigger the gun to clear out residual pressure in side blocks.

3. Remove the side blocks, p/n 23902-00 & 23903-00.



4. Remove one of the side block seal housings, p/n 23959-00 from side block. Leave the seal, p/n 23973-00 in housing and rinse with suitable solvent.



5. Turn the air ON to gun, pull the trigger to actuate the gun into spray position, when gun pulls back, keep in mind the purge air will not shut off. Turn OFF the air valve before releasing trigger.

6. Place seal / seal housing assembly into gun head so the face of seal sets against the chamber. Look thru the thru port of the Seal. The side port of the Chamber should be at the center, or slightly forward of the center line. If this adjustment appears to be correct, rotate the seal housing to ensure the air cap, p/n 23961-00 is not contacting the seal housing, p/n 23959-00. There should be no contact between these two parts. Contact will result in chamber damage.

7. Adjust the set screw, p/n 17259-16F until:

a. The side port of the chamber is “on center” with or forward of center of the thru port of seal.

b. The seal housing can be rotated and does not make contact with the air cap.

8. Turn the air ON and re trigger the gun, then shut the air OFF before releasing trigger. Re-check the throw.

9. If the set screw feels loose, Remove it from the rear cap, clean and apply non-permanent thread lock to threads and reinstall, set adjustment.

Service & Repair Kits

23975-00 Standard Repair Kit		
Part Number	**Description**	**Qty.**
7554-05	O-Ring	1
7554-06	O-Ring	1
7554-07	O-Ring	2
7554-09	O-Ring	2
7554-10	O-Ring	1
7554-16	O-Ring	3
7554-25	O-Ring	1
7554-26	O-Ring	1
7554-27	O-Ring	1
7554-29	O-Ring	1
7554-43	O-Ring	1
13867-08	O-Ring	2
13867-11	O-Ring	2
23974-07	O-Ring	2
23974-12	O-Ring	1

23980-00 Hardware Kit 04-05		
Part Number	**Description**	**Qty.**
15845-00	3/16” Ball Driver	1
15845-01	5/32” Ball Driver	1
17672-00	Pin Vise	1
23971-00	Screen Filter	2
14693-19	Drill Bit	1
14963-20	Drill Bit	1
23974-12	O-Ring	1
23974-07	O-Ring	2

23978-00 Side Seal Kit		
Part Number	**Description**	**Qty.**
23973-00	SST Side Seal	2
23974-07	O-Ring	2

O-ring p/n’s 7554-10 and 7554-07 (QTY. 1) are not used on the P2 Elite gun.

23979-00 Hardware Kit 00-03		
Part Number	**Description**	**Qty.**
15845-00	3/16” Ball Driver	1
15845-01	5/32” Ball Driver	1
17672-00	Pin Vise	1
23971-00	Screen Filter	2
14693-17	Drill Bit	1
14963-13	Drill Bit	1
14963-14	Drill Bit	1
14963-15	Drill Bit	1
23974-12	O-Ring	1
23974-07	O-Ring	2

23979-AA Hardware Kit -AA		
Part Number	**Description**	**Qty.**
14963-28	Drill Bit	1
14963-29	Drill Bit	1
15845-00	Ball Driver	1
15845-01	Ball Driver	1
17672-00	Vise Pin	1
23971-00	Filter Screen	2
23974-07	O-Ring	2
23974-12	O-Ring	1

23981-00 Premium Repair Kit		
Part Number	**Description**	**Qty.**
23974-05	O-Ring	1
23974-06	O-Ring	1
23974-07	O-Ring	4
23974-08	O-Ring	2
23974-09	O-Ring	2
23974-10	O-Ring	1
23974-11	O-Ring	2
23974-12	O-Ring	1
23974-16	O-Ring	3
23974-25	O-Ring	1
23974-26	O-Ring	1
23974-27	O-Ring	1
23974-29	O-Ring	1
23974-43	O-Ring	1

Cleaning Drill Chart

Round Mixing Chamber	Mixing Chamber Nozzle Cleaning Drill		Mixing Chamber Hole Cleaning Drill	
23960-AA	14963-16	0.042	14963-21	0.0292
23960-00	14963-17	0.052	14963-24	0.035
23960-01	14963-11	0.057	14963-16	0.042
23960-02	14963-12	0.071	14963-17	0.052
23960-03	14963-15	0.086	14963-13	0.059
23960-04	14963-19	0.094	14963-14	0.07
23960-05	14963-20	0.116	14963-15	0.086
DRILL PIN VISE 17672-00				

Tungsten Carbide				
LPA2-147-1525	LPA2-147-2340	LPA2-147-3625	LPA2-147-5250	LPA2-147-7265
LPA2-147-1540	LPA2-147-2350	LPA2-147-3640	LPA2-147-5265	LPA2-147-7640
LPA2-147-1840	LPA2-147-2640	LPA2-147-3650	LPA2-147-6240	LPA2-147-7650
LPA2-147-1850	LPA2-147-2650	LPA2-147-4325	LPA2-147-6250	
LPA2-147-2125	LPA2-147-3125	LPA2-147-4340	LPA2-147-6265	
LPA2-147-2140	LPA2-147-3140	LPA2-147-4350	LPA2-147-7240	
LPA2-147-2150	LPA2-147-3150	LPA2-147-5240	LPA2-147-7250	

The nozzle size is stated by the Orifice, Size, and Degree of Spray.
Example: LPA2-147-1525 .015 Orifice 25 Degrees

Non Atomized Tips, For use w/23976-00	
23047-J1	. Character Designates Pattern Width . Number Designates Orifice Contact the GlasCraft Tech. Service department for help matching a tip with an application.
23047-J2	
23047-J3	
23047-M1	
23047-M2	
23047-M3	
23047-P1	
23047-P2	
23047-P3	

Dispense Tip Reference Chart

Part Number		Orifice
23047-	J1	.012
	J2	.014
	J3	.022
	M1	.012
	M2	.014
	M3	.022
	N1	.012
	N2	.014
	N3	.022
	P1	.012
	P2	.014
	P3	.022

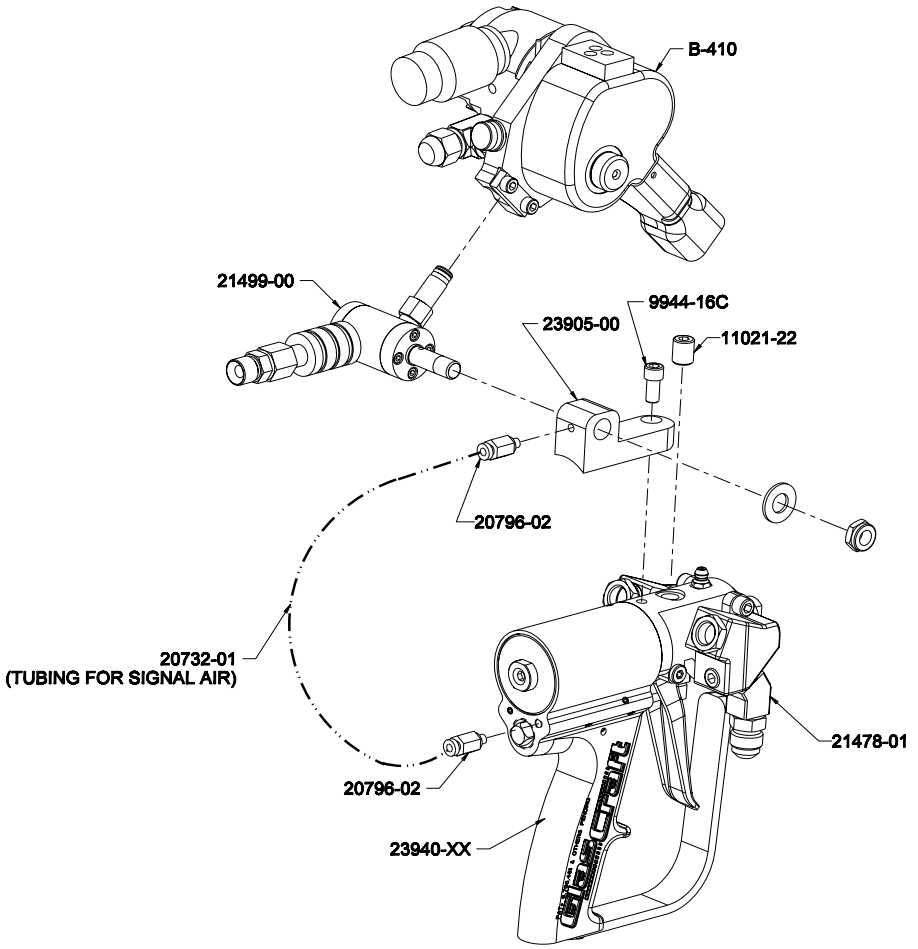
Dispense Tip Reference Chart

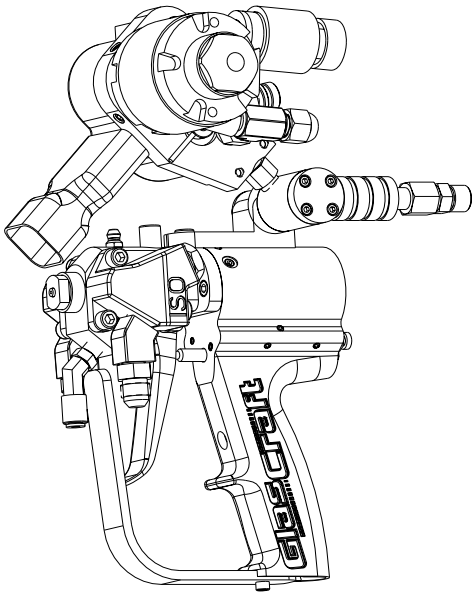
Part Number	Orifice
LPA2-147-1525	0.015
1540	0.015
1550	0.015
1565	0.015
1825	0.018
1840	0.018
1850	0.018
1865	0.018
2125	0.021
2140	0.021
2150	0.021
2165	0.021
2325	0.023
2340	0.023
2350	0.023
2365	0.023
2625	0.026
2640	0.026
2650	0.026
2665	0.026

Part Number	Orifice
3125	0.031
3140	0.031
3150	0.031
3165	0.031
3625	0.036
3640	0.036
3650	0.036
3840	0.038
3850	0.038
4325	0.043
4340	0.043
4350	0.043
4365	0.043
5225	0.052
5240	0.052
5250	0.052
5265	0.052

Part Number	Orifice
LPA2-147-6225	0.062
6240	0.062
6250	0.062
6265	0.062
7240	0.072
7250	0.072
7840	0.078

23942-01 B-410 Chopper (Vertical)

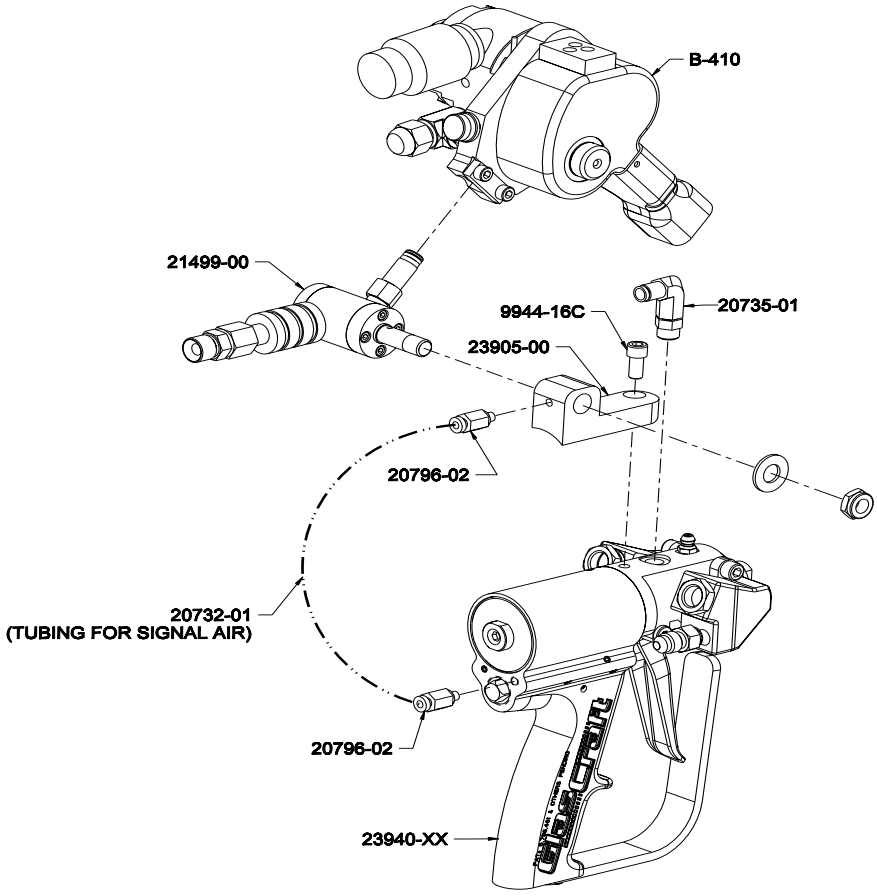


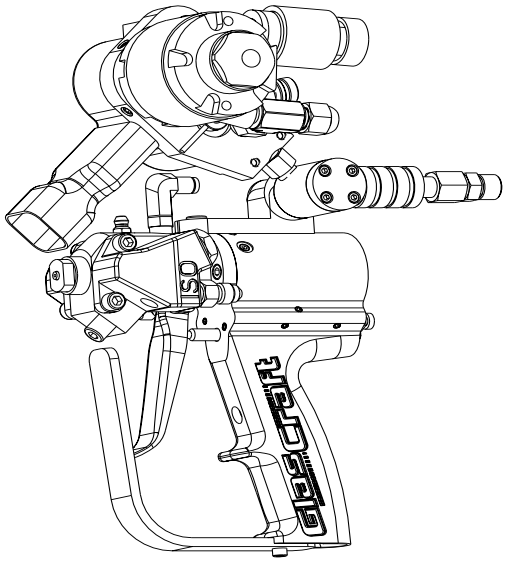


Part Number	Description	Qty.
17798-50	50 FT. AIR HOSE	1
20732-01	TUBING	4 IN.
20796-02	FITTING	2
21499-00	CHOPPER BLOCK	1
23905-00	P2 ELITE CHOPPER BLOCK	1
7554-13	O-RING	1
8115-03	PIPE FITTING	1
9944-16C	SCREW	1
B-410	CUTTER	1
GC-1021	USER MANUAL	1

*Fiberglass choppers can **only** be installed on P2 guns rev B to current*

23942-01 B-410 Chopper (Horizontal)

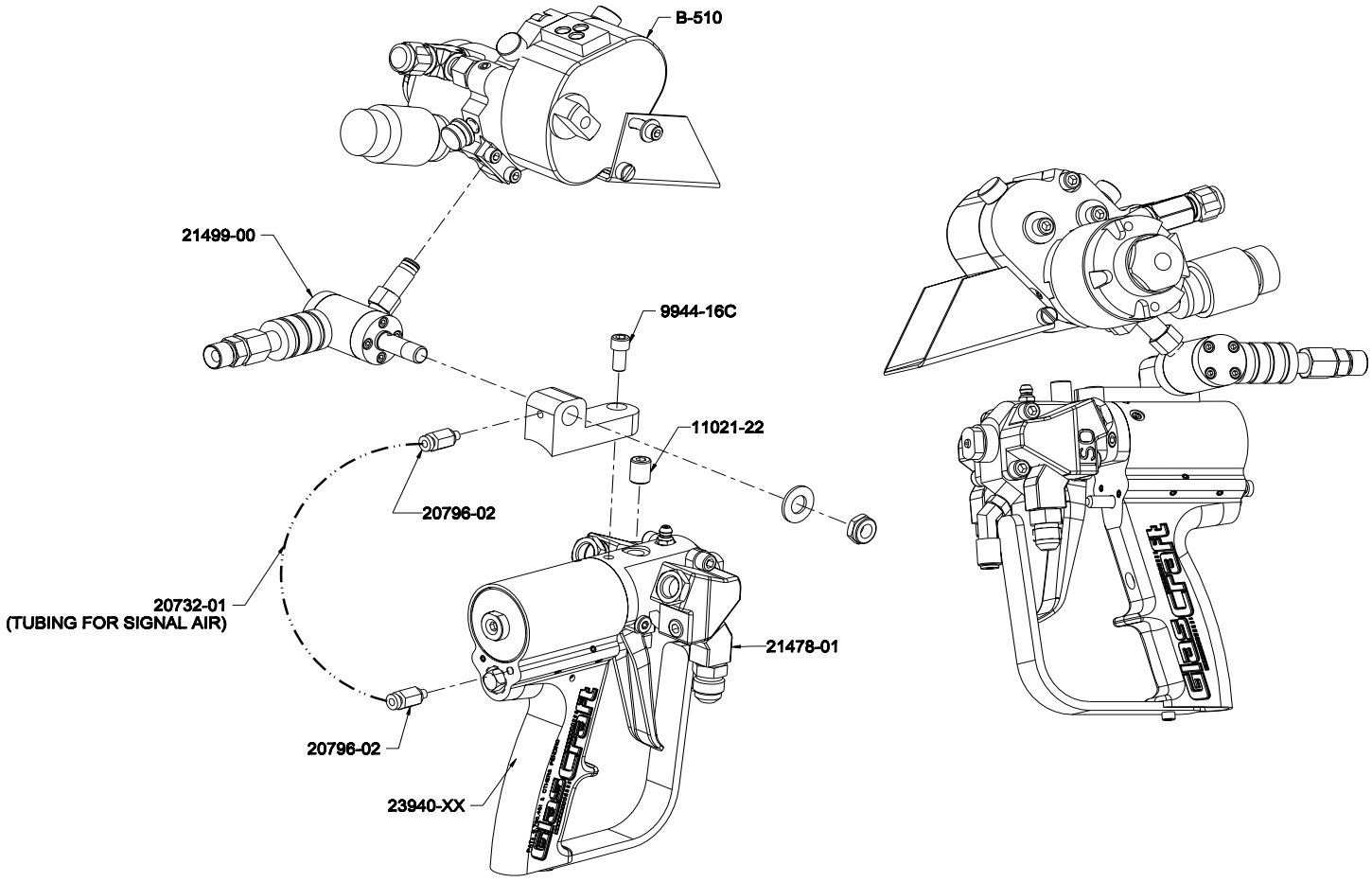




Part Number	Description	Qty.
17798-50	50 FT. AIR HOSE	1
20732-01	TUBING	4 IN.
20796-02	FITTING	2
21499-00	CHOPPER BLOCK	1
23905-00	P2 ELITE CHOPPER BLOCK	1
7554-13	O-RING	1
8115-03	PIPE FITTING	1
9944-16C	SCREW	1
B-410	CUTTER	1
GC-1021	USER MANUAL	1

*Fiberglass choppers can **only** be installed on P2 guns rev B to current*

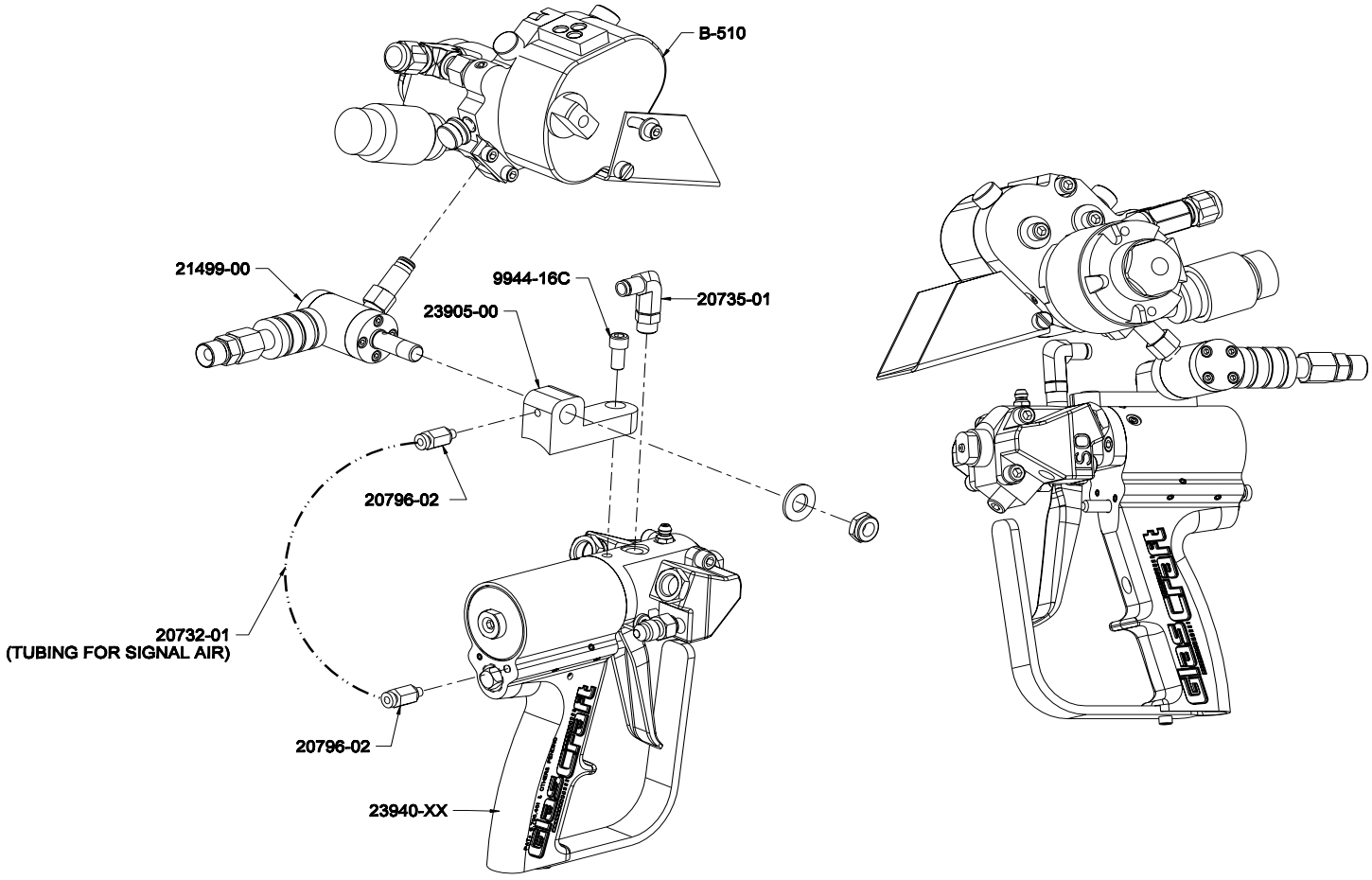
23942-02 B-510 Chopper (Vertical)



Part Number	Description	Qty.
17798-50	50 FT. AIR HOSE	1
20732-01	TUBING	4 IN.
20796-02	FITTING	2
21499-00	CHOPPER BLOCK	1
23905-00	P2 ELITE CHOPPER BLOCK	1
7554-13	O-RING	1
8115-03	PIPE FITTING	1
9944-16C	SCREW	1
B-510	CUTTER	1
GC-1021	USER MANUAL	1

*Fiberglass choppers can **only** be installed on P2 guns rev B to current*

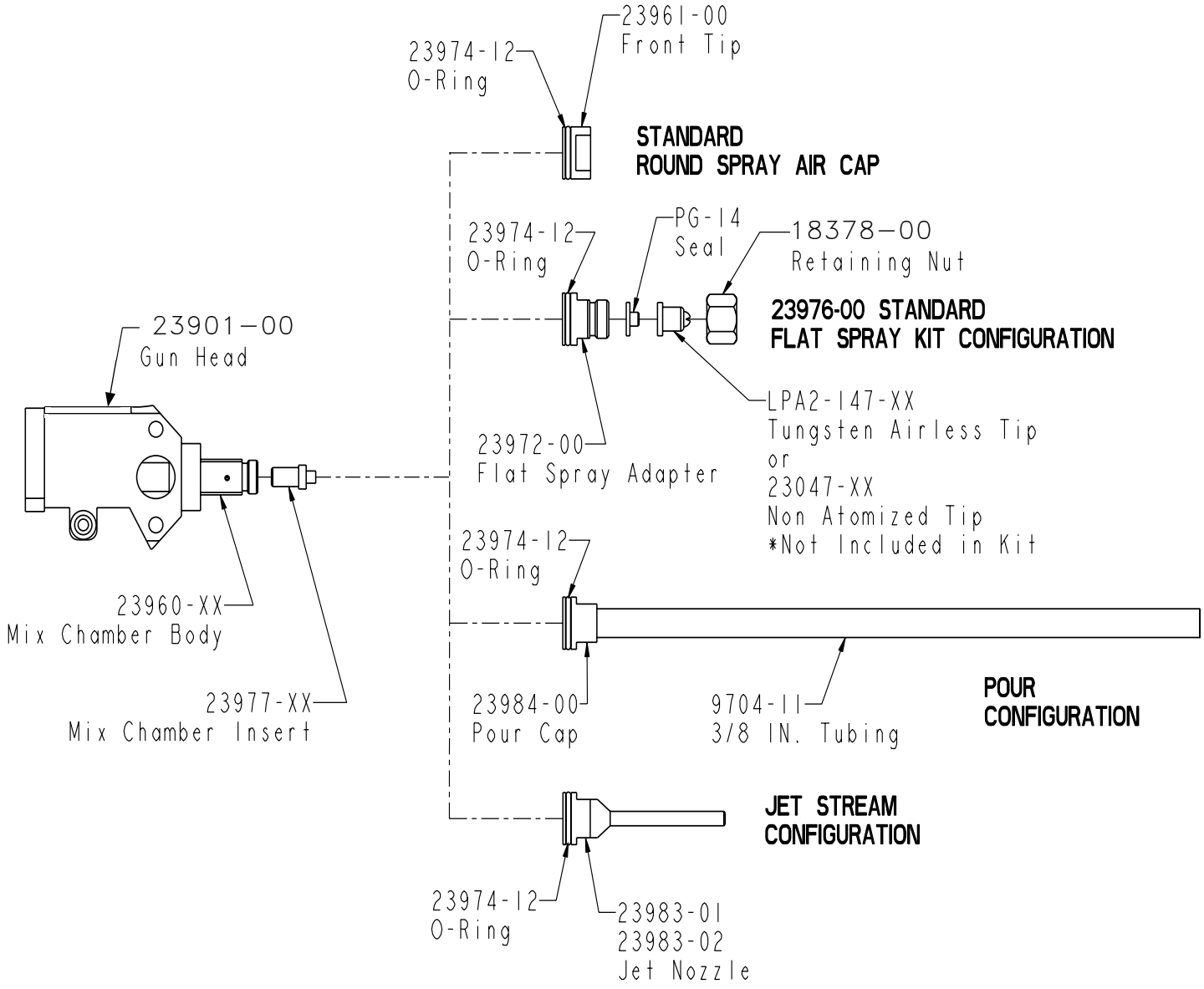
23942-02 B-510 Chopper (Horizontal)



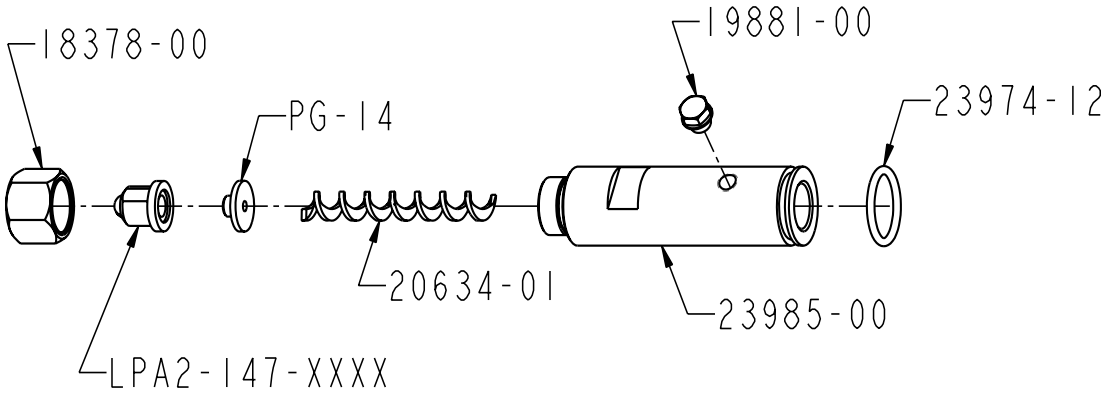
Part Number	Description	Qty.
17798-50	50 FT. AIR HOSE	1
20732-01	TUBING	4 IN.
20796-02	FITTING	2
21499-00	CHOPPER BLOCK	1
23905-00	P2 ELITE CHOPPER BLOCK	1
7554-13	O-RING	1
8115-03	PIPE FITTING	1
9944-16C	SCREW	1
B-510	CUTTER	1
GC-1021	USER MANUAL	1

*Fiberglass choppers can **only** be installed on P2 guns rev B to current*

P2 Elite Spray Options



23986-00 Static Mixer Kit



Part Number	Description	Qty.
PG-14	FLUID NOZZLE SEAL	1
18378-00	NOZZLE NUT	1
19881-00	PLUG FITTING	1
20634-01	SPIRAL MIXING ELEMENT	1
23974-12	O-RING	1
23985-00	STATIC MIXER ADAPTER	1

Section 4 - Notes

Section 4 - Notes

Section 4 - Limited Warranty Policy

GLASCRAFT, INC. ("GlasCraft") warrants to the original Purchaser of GlasCraft manufactured equipment and parts, that all GlasCraft manufactured equipment and parts will conform to their published written specifications and be free of defects in workmanship and material for a period of one (1) year from the original date of installation. GlasCraft makes no warranty to anyone other than the original Purchaser.

If any GlasCraft manufactured part or equipment is found to be defective in workmanship or material within the one-year period from the date of installation, as determined solely by GlasCraft, GlasCraft, in its sole discretion, will either repair or replace the defective part or equipment at GlasCraft's cost, including freight charges both ways, or credit or refund the purchase price for the defective equipment or part.

A warranty claim will be honored only when:

1. GlasCraft has been informed, in writing, of any such defect in workmanship or material within ten (10) days after discovery by the original Purchaser;

2. An official of GlasCraft has issued a return authorization number; and

3. The claimed defective equipment or part has been returned to GlasCraft by the original Purchaser, freight prepaid (with proper return authorization number(s) attached), to: GlasCraft, Inc., 5845 West 82nd Street, Suite 102, Indianapolis, IN 46278, U.S.A.

This warranty shall not apply to any equipment or parts that have been altered or repaired by anyone other than GlasCraft or to defects or damage resulting from improper installation, misuse, negligence, accident, or use not specified by GlasCraft. This warranty shall not apply to any equipment where any parts or components were replaced by any parts or components not manufactured or supplied by GlasCraft. The decision by GlasCraft shall be conclusive and binding on Purchaser.

GlasCraft does not warrant that any equipment or parts sold to Purchaser meet or comply with any local, state, federal, or other jurisdiction's regulations or codes. GlasCraft does not warrant that any equipment or part sold to Purchaser, when used individually or in concert with any other part, equipment, device, component or process, does not infringe on any patent rights of any third party. GlasCraft only warrants that it has no specific knowledge of any such infringement.

GlasCraft makes no warranty as to any parts or equipment manufactured by others. Purchaser shall look solely and only to the manufacturer of such parts or equipment with respect to any warranty claims. GlasCraft hereby assigns to Purchaser the original manufacturer's warranties to all such equipment and parts, to the full extent permitted.

THE AFORESAID WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. SPECIFICALLY THERE ARE NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH WARRANTIES ARE SPECIFICALLY DISCLAIMED.

GlasCraft shall not be liable for any loss or expense resulting from damage or accidents caused by improper use or application of materials manufactured or sold by GlasCraft or its distributors or agents.

UNDER NO CIRCUMSTANCES SHALL GLASCRAFT'S LIABILITY EXCEED THE AMOUNT PURCHASER PAID FOR THE CLAIMED DEFECTIVE EQUIPMENT OR PART. UNDER NO CIRCUMSTANCES SHALL GLASCRAFT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OR FOR LOST PROFITS.

No action arising from or relating to any goods manufactured by or purchased from GlasCraft may be brought more than one (1) year after the cause of action accrues.

Section 4 - Technical Assistance

Thank You for selecting GlasCraft spray equipment

Should you have any questions or need technical assistance, contact your factory authorized GlasCraft distributor.

Distributor: _____

Phone: _____

Contact: _____

For any issues your distributor cannot address, the GlasCraft technical service department is always available to assist you with the operation of your spray equipment. To help our technical representatives expedite your call and better address your questions, please have the following information ready and available when you phone GlasCraft.

*** If your questions are not urgent, You can e-mail all correspondence to service@glascraft.com**

Model: _____
Serial number: _____

Type of spray gun: _____
Serial number: _____

Is your equipment:

Single phase: _____ Three phase _____

What is the inbound voltage
to your equipment: _____

Temperature setting ISO: _____

Temperature setting POLY: _____

Temperature setting HOSE: _____

For Air Powered Systems:

Air compressor size: _____
CFM generated: _____

Pressure at the system:

Hydraulic _____ Pneumatic _____

Dynamic fluid pressure:

ISO _____ POLY _____

Spray gun chamber size: _____

Material being sprayed: _____

Viscosity: ISO _____ POLY _____

Approximate material temperature: _____

For Your Reference

GlasCraft
DISPENSING EXCELLENCE

Date Purchased _____
Distributor _____
_____
Contact _____
Phone _____
E-mail _____

GlasCraft manufactures a complete line of polyurethane foam and polyurea coating spray systems. If your application is in-plant or a field contractor - GlasCraft has a system package to meet your requirements.

GUARDIAN - AIR POWERED / A5 & A6 SERIES EQUIPMENT

- **6000 OR 12000 WATTS OF HEAT**
- **1600, 2200, OR 3000 PRESSURE SET-UPS AVAILABLE**

MH, MH II, & MH III HYDRAULIC POWERED SYSTEMS

- **UP TO 45 LBS / MINUTE OUTPUT**
- **EXCELLENT PERFORMANCE AND RELIABILITY**

GUARDIAN MMH - MOBILE MODULAR HYDRAULIC SYSTEMS

- **SPECIFICALLY DESIGNED FOR ANY TYPE OF SPRAY RIG**
- **GIVE COMPLETE UTILIZATION OF FLOOR SPACE IN MOBILE RIG**

PROBLER P2 SPRAY GUN

- **IMPINGEMENT MIX / AIR PURGE**
- **OPTIONAL NOZZLE FOR SPRAYING STUD WALLS, POURING & STREAM JET**

For more information concerning any of these GlasCraft products,
contact your local authorized GlasCraft distributor or visit www.glascraft.com

Quality and Performance…
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